

Abstract of the Disclosure

A quadrature phase modulation receiver for a spread spectrum communications system includes a mixer for mixing a received spread spectrum signal with a heterodyne signal to convert the frequency of the received signal to an intermediate frequency. A regulated oscillators module is coupled to the receiver for producing the heterodyne signal and signal equal to the intermediate frequency signal. A frequency multiplier circuit is coupled to the mixer for receiving the intermediate frequency signal and multiplying the frequency of the signal by a predetermined multiplication factor. An oscillator control signal is produced based on the frequency multiplied signal to maintain synchronization between the receiver and the transmitter.